LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of mitigating the production of water from a subterranean formation comprising:

injecting a consolidation composition comprising a furan-based resin into an interval in the subterranean formation~~, wherein the consolidation composition does not comprise a curing agent~~; and

permitting the consolidation composition to cure to a desired level of strength therein without the addition of a curing agent.

2. (Original) The method of claim 1 further comprising the step of isolating the interval prior to injecting the consolidation composition.

3. (Original) The method of claim 2 wherein the interval is isolated by locating a packer above and/or below the interval.

4. (Original) The method of claim 2 further comprising the step of treating the interval with a precursor solution prior to injecting the consolidation composition.

5. (Original) The method of claim 4 wherein the precursor solution comprises an aqueous brine and a cationic surfactant.

6. (Original) The method of claim 4 wherein the interval is located within a subterranean well bore, further comprising the step of displacing excess consolidation composition out of the well bore.

7. (Original) The method of claim 1 wherein the furan-based resin comprises a furfuryl alcohol resin, a mixture of furfuryl alcohol resins and aldehydes, or a mixture of furfuryl alcohol resins and phenolic resins.

8. (Original) The method of claim 7 wherein the furan-based resin comprises a furan-furfuraldehyde homopolymer and a furfuryl alcohol monomer.

9. (Original) The method of claim 8 wherein the furan-furfuraldehyde homopolymer is present in the furan-based resin in an amount in the range of from about 25% to about 45% by weight.

10. (Original) The method of claim 8 wherein the furfuryl alcohol monomer is present in the furan-based resin in an amount in the range of from about 55% to about 75% by weight.

11. (Original) The method of claim 7 wherein the furan-based resin comprises a phenol/phenol formaldehyde/furfuryl alcohol resin.

12. (Original) The method of claim 11 wherein the phenol is present in the furan-based resin in an amount in the range of from about 5% to about 30% by weight.

13. (Original) The method of claim 11 wherein the phenol formaldehyde is present in the furan-based resin in an amount in the range of from about 40% to about 70% by weight.

14. (Original) The method of claim 11 wherein the furfuryl alcohol is present in the furan-based resin in an amount in the range of from about 10% to about 40% by weight.

15. (Original) The method of claim 1 wherein the consolidation composition further comprises a silane coupling agent.

16. (Original) The method of claim 15 wherein the silane coupling agent is present in the consolidation composition in an amount sufficient to bond the furan-based resin to particulates in the formation.

17. (Original) The method of claim 16 wherein the silane coupling agent is present in the consolidation composition in an amount in the range of from about 0.1% to about 5% by weight of the furan-based resin.

18. (Original) The method of claim 15 wherein the silane coupling agent comprises n-2-(aminoethyl)-3-aminopropyltrimethoxysilane, 3-glycidoxypropyltrimethoxysilane, or n-beta-(aminoethyl)-gamma-aminopropyl trimethoxysilane.

19. (Original) The method of claim 1 wherein the consolidation composition further comprises a ductility imparting agent.

20. (Original) The method of claim 19 wherein the ductility imparting agent comprises phthalate.

21. (Original) The method of claim 20 wherein the ductility imparting agent comprises diethyl phthalate, butyl benzyl phthalate, and di-(2-ethylhexyl)phthalate.

22. (Original) The method of claim 19 wherein the ductility imparting agent is present in the consolidation composition in an amount in the range of from about 0.1% to about 10% by weight of the furan-based resin.

23. (Original) The method of claim 1 wherein the consolidation composition further comprises a surfactant.

24. (Original) The method of claim 23 wherein the surfactant comprises an ethoxylated nonyl phenol phosphate ester, an alkyl phosphonate, a non-ionic surfactant, or a mixture of one or more cationic surfactants.

25. (Original) The method of claim 24 wherein the alkyl phosphonate is a C_{12}-C_{22} alkyl phosphonate.

26. (Original) The method of claim 23 wherein the surfactant is present in the consolidation composition in an amount in the range of from about 0% to about 15% by weight of the furan-based resin.

27. (Original) The method of claim 1 wherein the consolidation composition further comprises a diluent.

28. (Original) The method of claim 27 wherein the diluent has a flash point above about 125°F.

29. (Original) The method of claim 27 wherein the diluent comprises 2-butoxy ethanol, butyl acetate, furfuryl acetate or a mixture thereof.

30. (Original) The method of claim 27 wherein the diluent is present in the consolidation composition in an amount in the range of from about 1% to about 200% by weight of the furan-based resin.

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Original) The method of claim 1 wherein the temperature in the subterranean interval is above about 300° F.

35. (Canceled)

36. (Original) The method of claim 1 wherein the consolidation composition further comprises a filler material.

37. (Original) The method of claim 36 wherein the filler material comprises microspheres, or silica sand.

38. (Original) The method of claim 1 wherein the consolidation composition is permitted to cure in the subterranean interval for a time period in the range of from about 6 hours to about 72 hours.

39. (Original) The method of claim 1 wherein the consolidation composition prevents or mitigates the entry of water into a subterranean well bore.

40. (Original) The method of claim 1 further comprising the step of isolating the interval prior to injecting the consolidation composition; further comprising the step of treating the interval with a precursor solution comprising an aqueous brine and a cationic surfactant prior to injecting the consolidation composition; wherein the interval is located within a subterranean well bore, further comprising the step of displacing excess consolidation composition out of the well bore; wherein the consolidation composition comprises silane coupling agent, a ductility imparting agent, and a diluent, wherein the temperature in the subterranean interval is above about 300 F; and wherein the isolation of the interval prevents or mitigates the entry of water into a subterranean well bore.

41-71. (Canceled)

72. (New) A method of mitigating the production of water from a subterranean formation comprising:

injecting a consolidation composition comprising a furan-based resin into an interval in the subterranean formation, wherein the temperature in the interval is above about 300°F; and

permitting the consolidation composition to cure to a desired level of strength therein without the addition of a curing agent.

73. (New) The method of claim 72 further comprising the step of isolating the interval prior to injecting the consolidation composition.

74. (New) The method of claim 73 wherein the interval is isolated by locating a packer above and/or below the interval.

75. (New) The method of claim 73 further comprising the step of treating the interval with a precursor solution prior to injecting the consolidation composition.

76. (New) The method of claim 75 wherein the precursor solution comprises an aqueous brine and a cationic surfactant.

77. (New) The method of claim 75 wherein the interval is located within a subterranean well bore, further comprising the step of displacing excess consolidation composition out of the well bore.

78. (New) The method of claim 72 wherein the furan-based resin comprises a furfuryl alcohol resin, a mixture of furfuryl alcohol resins and aldehydes, or a mixture of furfuryl alcohol resins and phenolic resins.

79. (New) The method of claim 78 wherein the furan-based resin comprises a furan-furfuraldehyde homopolymer and a furfuryl alcohol monomer.

80. (New) The method of claim 79 wherein the furan-furfuraldehyde homopolymer is present in the furan-based resin in an amount in the range of from about 25% to about 45% by weight.

81. (New) The method of claim 79 wherein the furfuryl alcohol monomer is present in the furan-based resin in an amount in the range of from about 55% to about 75% by weight.

82. (New) The method of claim 78 wherein the furan-based resin comprises a phenol/phenol formaldehyde/furfuryl alcohol resin.

83. (New) The method of claim 82 wherein the phenol is present in the furan-based resin in an amount in the range of from about 5% to about 30% by weight.

84. (New) The method of claim 82 wherein the phenol formaldehyde is present in the furan-based resin in an amount in the range of from about 40% to about 70% by weight.

85. (New) The method of claim 82 wherein the furfuryl alcohol is present in the furan-based resin in an amount in the range of from about 10% to about 40% by weight.

86. (New) The method of claim 72 wherein the consolidation composition further comprises a silane coupling agent.

87. (New) The method of claim 86 wherein the silane coupling agent is present in the consolidation composition in an amount sufficient to bond the furan-based resin to particulates in the formation.

88. (New) The method of claim 87 wherein the silane coupling agent is present in the consolidation composition in an amount in the range of from about 0.1% to about 5% by weight of the furan-based resin.

89. (New) The method of claim 86 wherein the silane coupling agent comprises n-2-(aminoethyl)-3-aminopropyltrimethoxysilane, 3-glycidoxypropyltrimethoxysilane, or n-beta-(aminoethyl)-gamma-aminopropyl trimethoxysilane.

90. (New) The method of claim 72 wherein the consolidation composition further comprises a ductility imparting agent.

91. (New) The method of claim 90 wherein the ductility imparting agent comprises phthalate.

92. (New) The method of claim 91 wherein the ductility imparting agent comprises diethyl phthalate, butyl benzyl phthalate, and di-(2-ethylhexyl)phthalate.

93. (New) The method of claim 90 wherein the ductility imparting agent is present in the consolidation composition in an amount in the range of from about 0.1% to about 10% by weight of the furan-based resin.

94. (New) The method of claim 72 wherein the consolidation composition further comprises a surfactant.

95. (New) The method of claim 94 wherein the surfactant comprises an ethoxylated nonyl phenol phosphate ester, an alkyl phosphonate, a non-ionic surfactant, or a mixture of one or more cationic surfactants.

96. (New) The method of claim 95 wherein the alkyl phosphonate is a C_{12}-C_{22} alkyl phosphonate.

97. (New) The method of claim 94 wherein the surfactant is present in the consolidation composition in an amount in the range of from about 0% to about 15% by weight of the furan-based resin.

98. (New) The method of claim 72 wherein the consolidation composition further comprises a diluent.

99. (New) The method of claim 98 wherein the diluent has a flash point above about 125°F.

100. (New) The method of claim 98 wherein the diluent comprises 2-butoxy ethanol, butyl acetate, furfuryl acetate or a mixture thereof.

101. (New) The method of claim 98 wherein the diluent is present in the consolidation composition in an amount in the range of from about 1% to about 200% by weight of the furan-based resin.

102. (New) The method of claim 72 wherein the consolidation composition further comprises a filler material.

103. (New) The method of claim 102 wherein the filler material comprises microspheres, or silica sand.

104. (New) The method of claim 72 wherein the consolidation composition is permitted to cure in the subterranean interval for a time period in the range of from about 6 hours to about 72 hours.

105. (New) The method of claim 72 wherein the consolidation composition prevents or mitigates the entry of water into a subterranean well bore.